

REMARKS/ARGUMENTS

Claims 1, 37, and 67 have been amended; claims 31-36 have been canceled; and claims 1-30, 38-66, and 68-78 remain unchanged. Thus, claims 1-30 and 37-78 are pending.

Claims 31-36 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 1-7, 9, 11-16, 18, 19, 21-23, 25, 26, 30, 31, 33-35, 37-43, 45, 47-52, 54, 55, 57-59, 61, 62, 66-69, 71-75 and 78 are rejected under 35 U.S.C. 102(e) as being anticipated by Schilling et al. (US 5,706,097).

Claims 8, 17, 20, 27-29, 32, 44, 53, 56, 63-65, 70 and 77 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schelling and Gibbon et al. (US 6,098,082).

Claims 10 and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schelling/Gibbon and Geaghan et al. (US 6,098,082).

Claims 24, 36, 60 and 76 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schelling and Geaghan.

As amended, all the pending claims of the subject application comply with all requirements of 35 U.S.C. Accordingly, Applicant requests examination and allowance of all pending claims.

The Rejection Under 35 U.S.C. § 101

Please cancel claims 31-36 without prejudice. Applicants reserve the right to re-submit claims 31-36.

The Rejections Under 35 U.S.C. § 102(e)

Claims 1, 37, and 67

Applicants respectfully submit that claim 1 as amended overcomes the rejection under 102(e) as allegedly being anticipated by Schelling et al. Claim 1 recites a computer-implemented method of generating a printable representation for an electronically stored multimedia document storing multimedia information, the multimedia information comprising information of at least a first type and information of a second type, the method comprising (1) accessing layout information specifying how the multimedia information stored by the multimedia document is to be printed on a paper medium and (2) automatically generating the

printable representation for the multimedia information stored in the multimedia document based upon the layout information, the printable representation for the multimedia document comprising a printable representation for information of the first type and a printable representation for information of the second type, the printable representation of the multimedia document capable of being printed on a paper medium.

Schelling et al. discloses a manual technique for generating an index print that includes a plurality of index images. Each index image represents a data file and may present either a thumb nail image (for representing an image-related data file, see Fig. 1, references 13, 15, and 17), or alternatively, a textual descriptor (for representing an audio data file, see Fig. 1, reference 19). An operator assembles the index images by manually operating different software for manipulating video, audio, and image files and composing content, such as QuickTime, Macromedia Freehand and Director, Adobe Photoshop, etc. See Schelling at col. 3, lines 1-39. In particular, when the operator encounters an audio data file, "appropriate text is generated by the operator and supplied in place of the thumbnail image." See Id. at col. 3, line 18-20. In the example of an audio recording of "Grandma's voice," the operator may generate the text message "GRANDMA" and use it in place of a thumbnail image to represent the audio recording. See Id. at col. 2, lines 64-67 and Fig. 1, reference 19. In addition, Schelling teaches that an index code may be added to each index image to label the index image (see Fig. 1, references 20 and 24). Also, one or more type indicator icons may be added to each index image to indicate the type of data (audio, video, etc.) contained in the corresponding data file (see Fig. 1, references 22, 26, 28, 30).

First, claim 1 as amended recites a computer-implemented method of generating a printable representation for an electronically stored multimedia document storing multimedia information comprising, amongst other limitations, the step of "automatically generating the printable representation for the multimedia information stored in the multimedia document based upon the layout information." Schelling et al. clearly teaches a manual technique that requires an operator to manually compose the index images, including inputting text messages, index codes, and type indicator icons, as well as manually arrange the index images for the index print. See Id., col. 3, line 63 to col. 4, line 2 ("The operator ... selects images from the data files ... generates text for subject matter descriptors ... appends an index code and a type indicator to

each subject matter descriptor to generate the index image, and arranges the index images or display on a CRT 53."). Nothing in Schelling teaches or suggests automatic generation of a printable representation based on layout information that is accessed. To the contrary, Schelling et al. explicitly teaches that its index print is assembled by an operator manually. This manual technique allows the operator to arrange the contents of the index print until he/she is satisfied with its appearance. See Id. at col. 3, lines 37-39 ("When the index print is compiled to the satisfaction of the operator, the operator prints the index image."). Thus, Schelling et al. fails to teach or suggest the method recited in claim 1.

Second, none of the features of Schelling et al. teaches or suggests a printable representation for an electronically stored multimedia document storing multimedia information comprising information of at least a first type and information of a second type, where the printable representation comprises a printable representation for information of the first type and a printable representation for information of the second type. While Schelling et al. teaches that each of its data files may be of a different type (video, audio, etc.), each data file is only represented by one type of information derived from multimedia information contained in the data file. For example, each index image representing a data file presents either a thumbnail image or a textual message, but not both. In fact, Schelling et al. explicitly states a textual message, if used, is to take the place of a thumbnail image. See Id. at col. 3, lines 18 ("For sound sequences, appropriate text is generated by the operator and supplied in place of the thumbnail image") and col. 3, line 37 ("... [the] text replaces the thumbnail image"). Thus, Schelling et al. fails to disclose, and in fact teaches away from, a printable representation for an electronically stored multimedia document storing multimedia information comprising information of at least a first type and second type, where the printable representation comprises a printable representation for information of the first type and a printable representation for information of the second type, as recited in claim 1.

Further, the text message, index code, and one or more type indicator icons disclosed by Schelling et al. are generated separately from multimedia information, and therefore do not represent the "information of the second type" that make up "multimedia information comprising information of at least a first type and information of a second type" as recited in claim 1. For example, Schelling et al. discloses that the text message, index code, and one or

more type indicator may be added by an operator using an input device such as a keyboard. See Id., col. 3, line 63 to col. 4, line 1 ("The operator, via an input device such as a keyboard 52, selects images from the data files for making thumbnail images and generates text for subject matter descriptors. The operator appends an index code and a type indicator to each subject matter descriptor to generate the index images ... "). Clearly, such data comes from the operator and does not come from the multimedia information itself. Thus, the text message, index code, and one or more type indicator icons do not teach or suggest the "information of a second type" that makes up the multimedia information, as recited in claim 1.

For at least these reasons, it is believed that claim 1 is neither anticipated nor made obvious by the teachings of Schelling et al. Claims 37 and 67 recite similar limitations as claim 1 and are also believed to be neither anticipated nor made obvious by Schelling et al., for at least the reasons stated above with regard to claim 1.

Claims 12, 20, and 21

Claim 12 recites, amongst other features, that "a time span is associated with at least one page of the multimedia paper document, the time span characterized by a first time and a second time; and the at least one page of the multimedia paper document is imprinted with a portion of the printable representation for the multimedia document corresponding to multimedia information occurring between the first time and the second time associated with the at least one page."

As the Examiner states, the cited portions of Schelling et al. disclose data such as the file size or duration of a sequence, date and time of recording of data, etc. However, these types of data are associated only with the data file (e.g., the audio recording) itself; they are not associated with a page of a multimedia paper document. For example, a date and time of recording of data, as disclosed by Schelling et al., contains only the date and time at which the media content was recorded. This date and time data is not associated with a page of the multimedia paper document. As another example, the file size or duration of a sequence, as disclosed by Schelling et al., contains only information regarding the size and duration of a sequence or a recording. Again, such data is not associated with a page of the multimedia paper document. In fact, none of the different types of data disclosed in Schelling et al. teaches or remotely suggest a time span that is associated with at least one page of the multimedia paper

document, as recited in claim 12. Furthermore, none of the different types of data disclosed in Schelling et al. teaches or suggests that such a time span associated with a page of the multimedia paper document may be characterized by a first time and a second time. Given the forgoing, it is believed that claim 12 is clearly patentable over Schelling et al.

Claim 20 recites, amongst other features, "at least one page of the multimedia paper document is imprinted with a portion of the printable representation for the multimedia document corresponding to a time span associated with the at least one page, the time span characterized by a first time and a second time." As mentioned above, the cited portions of Schelling et al. disclose different types of data associated only with the data file itself; they are not associated with a page of a paper document. Thus, for at least reasons similar to those discussed above with respect to claim 12, claim 20 is patentable over Schelling et al.

Claim 21 recites, amongst other features, that "one or more video frames are extracted from the video information occurring during a time span associated with [a] page [of a paper document], the time span characterized by a first time and a second time." Again, the cited portions of Schelling et al. disclose different types of data associated only with the data file itself; they are not associated with a page of a paper document. Thus, for at least reasons similar to those discussed above with respect to claim 12, claim 21 is also patentable over Schelling et al.

Claim 15 and 51

Claim 15 recites, amongst other features, that "the at least one page of the one or more printed pages is imprinted with identifiers for temporally correlating the printable representation for information of the first type printed on the page with the printable representation for information of the second type printed on the at least one page."

Schelling et al. merely discloses "index codes" for labeling different index images. See Schelling et al., Fig. 1, references 20 and 24. These index codes do not signify any relationship between the index images taught by Schelling et al., other than the fact that an operator may have arranged the index images in a particular order according to his/her own preference. See Schelling et al. at col. 3, lines 37-39 ("When the index print is compiled to the satisfaction of the operator, the operator prints the index image."). In fact, the index images of Schelling et al. may represent separate data files that have nothing to do with one another.

Clearly, the index codes do not correlate the index images in terms of time ("temporally"). Furthermore, the index images of Schelling et al. do not constitute a printable representation comprising a printable representation for information of the first type and a printable representation for information of the second type, where the information of the first type and the information of the second type make up an electronically stored multimedia document, as discussed previously with respect to claim 1. As such, Schelling et al. does not teach or suggest "identifiers for temporally correlating the printable representation for information of the first type printed on the page with the printable representation for information of the second type printed on the at least one page," as recited by claim 15. It is therefore believed that claim 15 is patentable over Schelling et al.

Claim 51 recites similar limitations as claim 15 and are also believed to be neither anticipated nor made obvious by Schelling et al., for at least the reasons stated above with regard to claim 15.

Claim 57 and 74

Claim 57 recites, amongst other features, a "printable representation including one or more video keyframes extracted from the multimedia information occurring during a time span characterized by a first time and a second time, the printable representation including text information extracted from the multimedia information occurring during the time span." Here, the one or more video key frames are extracted from the multimedia information occurring during a time span, and the text information is extracted from the same multimedia information occurring during the same time span.

As discussed in detail above with regard to claim 1, while Schelling et al. teaches that each of its data files may be of a different type (video, audio, etc.), each data file is only represented by one type of information derived from multimedia information contained in the data file. For example, each index image representing a data file presents either a thumbnail image or a textual message, but not both. Thus, Schelling fails to disclose, and in fact teaches away from, the extraction of both video keyframes and text information from the same multimedia information occurring during the same time span. For at least these reasons, claim 57 is believed to be neither anticipated nor made obvious by Schelling et al.

Claim 74 recites similar limitations as claim 57 and are also believed to be neither anticipated nor made obvious by Schelling et al., for at least the reasons stated above with regard to claim 57.

The Rejections Under 35 U.S.C. § 103(a)

Claims 28, 29, 64 and 65

Claim 28 recites, amongst other features, three distinct steps of (1) "determining a time period during the time span associated with the page of the paper document when the closed-caption information is empty"; (2) "determining a video feature from the video information occurring during the time period"; and (3) "printing text identifying the video feature on the page." The Examiner points to the description in Gibbons et al. of "a pictorial transcript, which has three images without any intervening captions" as supposedly disclosing the limitations of claim 28. See Office Action at p. 8, citing Gibbons et al. at Fig. 2(a) and col. 8, lines 15-16. However, it is unclear how this description in Gibbons et al. possibly teaches the three distinct steps recited in claim 28. First, the fact that "a pictorial transcript, which contains three images without intervening captions" exists does not necessarily imply that a step is performed to "determine a time period during the time span associated with the page of the paper document when the closed-caption information is empty." The Examiner simply does not point to any portion of Gibbons et al. that even remotely suggests that such distinct step is to be performed. Second, without determining such a time period, Gibbons et al. certainly does not perform the step of "determining a video feature from the video information occurring during the time period." Finally, without determining such a video feature, Gibbons et al. does not perform the step of "printing text identifying the video feature on the page." For at least these reasons, it is believed that claim 28 is patentable over the combination of Schelling et al. and Gibbon et al.

Claim 29 recites similar limitations as claim 28, except that an audio feature is determined from audio information during the time period. For at least similar reasons as stated above with regard to claim 28, claim 29 is also patentable over the combination of Schelling et al. and Gibbon et al.

Claim 64 recites, amongst other features, "text related to a video feature extracted from video information included in the multimedia information during the time span when the closed-caption text information is empty." The cited portions of Gibbons et al. does teach or

suggest any such text extracted from video information during such a time span. For at least this reason, it is believed that claim 64 is patentable over the combination of Schelling et al. and Gibbon et al.

Claim 65 recites similar features as claim 64, except that text related to an audio feature is extracted from audio information during the time span. For at least similar reasons as stated above with regard to claim 64, claim 65 is also patentable over the combination of Schelling et al. and Gibbon et al.

Other Claims Rejected Under 102(e) and 103(a)

Dependent claims 2-20, 22-30, 38-56, 58-66, 68-73, and 75-78 depend from independent claims 1, 21, 37, 57, 67, 74, respectively. Each of the dependent claims includes all of the limitations of its independent claim and is patentable for at least the reasons stated above with regard to its independent claim.

Further, dependent claims 13-18 depend from claim 12 and incorporate all its limitations. As such, claims 13-18 are also patentable for at least the additional reasons stated above with respect to claim 12.

Dependent claims 22-30 depend from claim 21 and incorporate all of its limitations. As such, claims 22-30 are also patentable for at least the additional reasons stated above with respect to claim 21.

Dependent claims 58-66 depend from claim 57 and incorporate all of its limitations. As such, claims 58-66 are also patentable for at least the additional reasons stated above with respect to claim 57.

Dependent claims 75-78 depend from claim 74 and incorporate all of its limitations. As such, claims 75-78 are also patentable for at least the additional reasons stated above with respect to claim 74.

Information Disclosure Statement

Applicants draw the Examiner's attention to commonly assigned co pending U.S. Patent Application No. 10/175,540; filed June 18, 2002 (Attorney Docket No. 15358-006510US) and U.S. Patent Application No. 10/645,821; filed August 20, 2003 (Attorney Docket No.

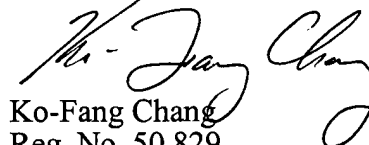
15358-006520US). It is requested that the Examiner consider the prosecution of these commonly owner, co-pending applications in the prosecution of the present application.

CONCLUSION

In view of the foregoing, Applicants believe all claims now pending in this Application are in condition for allowance. The issuance of a formal Notice of Allowance at an early date is respectfully requested.

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at 650-326-2400.

Respectfully submitted,


Ko-Fang Chang
Reg. No. 50,829

TOWNSEND and TOWNSEND and CREW LLP
Two Embarcadero Center, Eighth Floor
San Francisco, California 94111-3834
Tel: 650-326-2400 / Fax: 415-576-0300
KC/ka
60307830 v1